

13th CHRIS meeting
17-19 September 2001, Athens, Greece

REPORT ON CSC ACTIVITIES, IN RELATION TO CHRIS

(Peter Cox, CSC Chairman, September 2001)

1. Introduction

The CSC is making steady progress in its activities. A number of tasks requiring the attention of the CSC Secretariat, have however, had an impact on the Secretariat's planned work schedule. These have included providing advice and assistance to the IHB [including input to Circular Letters and the new IHB symbol booklet listing], advice on specific queries to Member States and the monitoring of relevant work at IMO [involving a particularly high number of relevant papers].

2. Long standing CSC Tasks

Progress has continued to be made on a number of the long standing, major tasks which are allocated to the CSC.

a. Specifications of the IHO for Small-scale International (INT) Charts.

Revision of the Small-scale Specifications to incorporate them in M-4 as Part C, completed and passed to the IHB in September 2000, was circulated to all IHO Member States by IHB CL 18/2001 dated 30 March 2001. It invited Member States to review and send comments to the IHB by 30 June 2001. CSC Secretariat is currently awaiting details from the IHB of any comments received.

b. International Notices to Mariners (INT NMs)

The CSC Vice-Chairman is continuing the CSC's study into the concept of International NMs with collation of the various national criteria used by different Hydrographic Offices to identify chart-correcting NMs.

c. Guidance for Regional Coordinators of International (INT) Chart Schemes

Work on the Guidance for Regional Coordinators of International (INT) Chart Schemes [former S-48] which was being revised, incorporated in M-11 [Catalogue of International (INT) Charts], and rationalized, has not progressed. Re-assessment of priorities has meant that it has been put on hold for the present.

3. M-4

a. Revision of M-4. M-4 is a combination of product specification and presentation library. The CSC's task of reviewing M-4 Part B is progressing. The following points, which were established during the Secretariat's initial work on the review and revision, accompanied the revised draft of Section 100, circulated by CSC CL 4/2001:

- i. The current edition of M-4 Part B [formerly designated Part 1 - IHO CL 21/2000 refers], was issued in loose leaf format in 1988, and with a few notable exceptions, has remained largely unchanged since that date.
- ii. The intention was that it should provide an internationally-agreed, product specification, albeit loosely worded, for both national and international charts at medium- and large-scale.
- iii. At the time it was written, however, the term 'charts' referred, *de facto*, to paper, ie analogue, charts; digital charts were yet to become a viable reality.
- iv. The subsequent development of digital charts presented additional requirements which were met by the development of S-52 and S-57. Both S-52 and S-57 make full use of the background information already contained in M-4 Part B and include cross-references where appropriate.
- v. The current role of M-4 Part B is therefore twofold, in that it provides:
 - ? an explanation of the general concepts and rationale behind the symbology used in charting, much of which is relevant to both digital and analogue [paper] charts

- ? specific guidance for paper charts, including the use of text and symbology
 - vi. To enable M-4 Part B to provide the internationally-agreed, product specification referred to in paragraph ii. above, some amendments are necessary to reflect better the existence and content of digital charts, S-52 and S-57.
 - vii. The aims of the 2001 review and revision of M-4 Part B are therefore five-fold:
 - ? to insert new specifications, and update existing specifications, where necessary. As a wide range of other publications [both national and international, including INT 1, S-52, S-57] are based on, or contain references to, M-4 Part B, any changes to paragraph numbers will need to be done only in extremis.
 - ? to clarify the two-fold role of M-4 Part B and its links with both analogue [ie paper] and digital charts. Although references to digital charts, S-52 and S-57 will be included in the introductory sections, it is not considered appropriate in this revision to re-organize the entire content of M-4 Part B to reflect its two-fold role; rather, it is the intention of this review and revision to ensure that the specifications are factually complete providing a base-line to define specifications for charts now. This is needed to allow us to move forward; re-organization, if appropriate, can then be carried out at a later date.
 - ? to improve M-4 Part B's compatibility with S-52 and S-57.
 - ? to make the wording more prescriptive where possible, continuing the progress which has been made towards greater international standardization over the last 15-20 years, exemplified by the publication of S-52 and S-57. However, it is acknowledged that there is still a wide range of views on how features should be charted.
 - ? to complete the overall assessment before the International Hydrographic Conference in April 2002. Particular topics requiring more extensive attention will be noted for specific action at a later date.
 - b. **Part B - Section 100.** An initial draft revision was circulated earlier this year. CSC members' responses to the initial draft revision of Section 100 have been incorporated in a second draft which is about to be circulated to members. The revised draft also incorporates the TSMAD Chairman's comments on the first draft. Some of the issues which we raised in the context of the review of Section 100 are basic to defining the way in which other aspects of the CSC's work are carried forward. Those CSC tasks which had been awaiting completion of the review of Section 100 are now being progressed, notably ESSAs [see below].
 - d. **Part B Section 400.** Revised specifications are currently being drafted, incorporating the responses received in the revision of Section 100, for those most in need of amendment, including dangers, oil and gas, restricted and unrestricted areas, and routeing measures.
 - e. **Digital M-4.** CSC Secretariat has provided assistance to the IHB in the production of the digital version of M-4 Part B.
 - f. **M-4 as an ISO standard.** There has been no further discussion in the CSC since last year's meeting.
4. **Symbology**
- a. **Environmentally Sensitive Sea Areas [ESSAs].** After circulation of the initial CSC discussion paper [aimed at identifying the issues involved and obtaining views on a number of fundamental points], the CSC Secretariat collated those responses, and continued to develop and consolidate its thoughts on ESSAs in general, providing input as necessary to other fora. A number of issues, relevant to completion of the specification for ESSAs, were raised in the revision of Section 100. An integral part of this was monitoring of the discussions in IMO [with respect to the designation of Particularly Sensitive Sea Areas (PSSAs) and No-Anchoring Areas, to protect areas such as coral] and within the IHO, in particular, those within the Caribbean and Gulf of Mexico Hydrographic Commission concerning the charting of coral areas. This monitoring and reflection has provided a greater appreciation of the topic of ESSAs and its complexities. It now seems appropriate that ESSAs should form a completely new section, B-437, with appropriate cross references to, in particular, B-435 [Routeing Measures], B-439 [Restricted and Unrestricted Areas] and B-449 [Various Maritime Areas]. It is also proposed to incorporate a new specification on coral areas bringing together the two aspects of coral ie as a danger to shipping and as a sensitive habitat.

Although the IMO discussions relate to Special Areas (SAs), Particularly Sensitive Sea Areas (PSSAs) and No Anchoring Areas, these measures cannot be taken in isolation. It is essential that decisions on the charting of any specific type of ESSA be considered in the wider context of all types of ESSAs. To ensure that the proposals took full account of IMO's decisions, it was inappropriate to put forward further proposals on the charting of ESSAs whilst IMO's discussions were in progress. IMO's development of its draft Resolution 'Guidelines for the designation of Special Areas under MARPOL 73/78 and Guidelines for the identification and designation of Particularly Sensitive Sea Areas' is now close to completion. The 46th session of IMO's Marine Environment Protection Committee (MEPC 46) approved, in principle, the text of the revised draft Assembly resolution and instructed the NAV Sub-Committee to review the text carefully and submit its comments directly to the twenty-second session of the Assembly in November 2001. The CSC Secretariat briefed the IHB for NAV 47 in July 2001. Following NAV 47, the ESSA specification is being completed as a matter of some urgency and will be circulated shortly.

- b. **Proposal prepared by Finland and Sweden for adopting "fairway area" as INT symbology.** The Secretariat has worked on this task but, for a variety of reasons has not circulated a draft specification to members. The responses to the draft revision of Section 100 can now be incorporated in the work which has already been completed.
- c. **Inclusion of Zones of Confidence (ZOC) in M-4 and provision of ZOC data.** Following the discussions at last year's CSC meeting, the specifications in M-4 Part B are being revised to include reference to ZOCs and their use, in addition to Source and Reliability Diagrams. Work on these specifications is following on from the revision of Section 100.
- d. **Ferries and Routes for High Speed Craft [HSC].** M-4 Part B Specification 438 covering Ferries has been revised and incorporates new paragraphs covering High Speed Craft. The CSC's completed specification was passed to TSMAD and to the IHB earlier this year.

5. **Harmonization of INT1, S-52 and S-57 - liaison with TSMAD and C&SMWG**

The CSC work item related to a new document to link INT1 and S-52 has been incorporated in the work linking INT 1 to S-57. It is available as an Annex to S-57.

6. **CSC relations with CHRIS and the future of CHRIS and CSC after IHC 2002**

Following the discussions last year within both the CSC and CHRIS, the CSC Chairman has recently prepared a paper on the role of CSC and its relationship with CHRIS. The CSC believes that such a fundamental change as restructuring of the IHO's Committees and Working Groups should be referred to International Hydrographic Conference (IHC), rather than dealt with by Circular Letter. The forthcoming XVIth IHC presents the opportunity for such a discussion. The paper is intended to inform that discussion.

The primary role of the IHO's Committees and Working Groups is to assist the IHO in achieving its objectives. To facilitate this, the structure of these Committees and Working Groups needs to be continually reviewed to ensure that this role is fulfilled in the most appropriate manner. At a time when the IHO's focus is shifting increasingly to the requirements of the electronic world, it is important to consider the role (existing and future) of the IHO's Chart Standardization Committee (CSC) in relation to the Committees and Working Groups established to meet the specific needs of electronic charting ie Committee on Hydrographic Requirements for Information Systems (CHRIS) and its Working Groups.

The CSC has a continuing valuable contribution to make to future charting whether it be paper or electronic, particularly to provide the reasons why and approach to be adopted to the basic content of chart information. To assist the IHO achieve its objectives, it is important that future work by the IHO's Committees and Working Groups is more fully integrated. To ensure that the CSC's work is integrated with that of the existing CHRIS working groups, it proposes that the scope of CHRIS be extended to incorporate the work detailed in the CSC's terms of reference and to change the status of CSC to a Chart Standardization and Paper Chart Working Group of CHRIS from the next IHC in April 2002. The current on-going changes in marine cartography mean that it is no longer feasible for the CSC and CHRIS to continue in parallel; the closer liaison introduced to date, although improving the situation, is not delivering all the co-ordination required. It believes the restructuring proposed to be in the interests of all concerned.

7. **Liaison with Other IHO bodies**

Briefs have been provided to a number of Regional Hydrographic Commission meetings, to the IHB and to IMO meetings, including NAV 47.